



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,595	10/28/2003	William Joseph Semper	2003.10.002.WS0	5366
23990	7590	01/21/2009		
DOCKET CLERK			EXAMINER	
P.O. DRAWER 800889			LIM, STEVEN	
DALLAS, TX 75380				
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			01/21/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/695,595

**Applicant(s)**

SEMPER, WILLIAM JOSEPH

**Examiner**

STEVEN LIM

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3-12, and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Porta et al. (US 20020057657) in view of Nieminen et al. (US 20040005884) and further in view of Manning et al. (US 6580699).
4. Regarding Claims 1 and 12, La Porta et al. discloses a handoff system including a first base station (BS9) capable of wirelessly communicating with a source mobile station (mobile device linked with base station, Paragraph 73), a correspondent node (domain root router connects a source base station to the internet and a correspondent node which communicates to a destination, Fig. 2, Items 110 and 150), a mobile

switching center (domain root router) capable of connecting a first and second base station (Paragraph 73) and a local IP network capable of transferring data packets associated with said MS-MS packet data call directly between said first and second base stations via a first packet data bearer connection, wherein said first base station is capable of receiving a first message (handoff path setup message transmitted to new base station to forward to old base station, Paragraph 85-87) from said source mobile station indicating that said source mobile station is to be handed off to a third base station (BS10), and wherein said first base station, in response to said first message, initiates establishment of a second packet data bearer connection on said local IP network for transferring said data packets associated with said MS-MS packet data call directly between said second and third base stations (updates routing entry table for all packets to route from any base station directly to new base station, Paragraph 87), however La Porta et al. fails to disclose the correspondent node communicates to a destination mobile station, transferring data packets directly, and the MSC sending an assignment request and receiving an assignment complete message.

5. In an analogous art, Nieminen et al. discloses a correspondent node communicating with a destination mobile station (Fig. 3, Item 305 and 307), which enables communication between devices connected through the Internet.
6. In an analogous art, Manning et al. discloses transferring data packets directly (Col. 8, Line 56- Col. 9, Line 12) and sending both an assignment request and complete message (Fig. 6, Items 96 and 106), which enables a timely maintenance when a mobile station roams from one BSC to another and the use of radio resources.

7. It would have been obvious to one having ordinary skill in the art at the time of invention was made to have the correspondent node communicate with a destination mobile station because it allows communication between devices through the Internet.

8. It would have also been obvious to one having ordinary skill in the art at the time of invention was made to transfer the data packets directly and to send assignment requests and complete messages in order to allow for timely maintenance during roaming and allows the MSC to use certain radio resources.

9. Regarding Claim 3, La Porta et al. further discloses the first bases station (BS9) is operable to respond to said first message by transmitting a second message to said mobile switching center (router) indicating that said source mobile station is being handed off to said third base station (BS10) and wherein said second message contains and IP address of said second base station on said local IP network (Source IP), a service option field (message type) associated with said MS-MS packet data call, a call identifier value (sequence number) used by said first and second base stations to identify said MS-MS packet data call, and mobile identifier values (mobile device IP and destination IP) associated with said source and destination mobile stations (Handoff message sent to new router which forward to router R7 and router forward to old base station BS9, Paragraph 70 and 87).

10. Regarding Claim 4, La Porta et al. further discloses the second message comprises a Handoff Required message (handoff path setup message, Paragraph 70, and 85-87).

11. Regarding Claim 5, La Porta et al. further discloses transmitting a third message to said third base station (BS10), wherein said third message contains: said IP address of said second base station on said local IP network, said service option field associated with said MS-MS packet data call, said call identifier value used by said first and second base stations to identify said MS-MS packet data call, and said mobile identifier values associated with said source and destination mobile stations (Paragraph 70, 85-87), however La Porta et al. fails to disclose the mobile switching center (router) is operable to respond to said second message and send the message to the third base station.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to send the handoff required message to the old base station to be forwarded through the MSC to the new base station instead of sending the handoff required message directly to the new base station in order to accommodate the mobile station when not yet authorized to communicate with the new base station.

12. Regarding Claim 6, La Porta et al. further discloses the third message comprises a Handoff Request Message (handoff path setup message, Paragraph 85-87).

13. Regarding Claim 7, La Porta et al. further discloses the third base station (BS10) responds to said third message by establishing said second packet data bearer connection (associated interface for all packets delivered to mobile device) with said second base station (BS11)(Paragraphs 75 and 86).

14. Regarding Claim 8, La Porta et al. further discloses the third base station (BS10) established said second packet data bearer connection using an IP address of said second base station, a call identifier value used by said first and second base stations

to identify said MS-MS packet data call, and mobile identifier values associated with said source and destination mobile stations (Paragraph 86).

15. Regarding Claim 9, La Porta et al. further discloses the second base station (BS11) responds to the establishment of said second packet data connection by said third base station (BS10) by transmitting data packets associated with said MS-MS packet data call to said third base station via said second packet data bearer connection (data transmitted through default routing path, Paragraph 75).

16. Regarding Claim 10, La Porta et al. further discloses the mobile switching center is operable to transmit a fourth message (packets redirected and router forwards instant handoff path setup message to BS9, Paragraph 87) to said first base station (BS9) after said source mobile station is handed off to said third base station, and wherein said fourth message causes said first base station to notify said second base station (BS11) that said first packet data bearer connection between said first and second base stations is being removed (routing table entry changes, Paragraph 87).

17. Regarding Claim 11, La Porta et al. further discloses the second base station in response to said notification from said first base station that said first packet data bearer connection is being removed ceases transmitting data packets associated with said MS-MS packet data call to said first base station (Paragraph 75).

18. Regarding Claim 14, La Porta et al. further discloses the first bases station (BS9) is operable to respond to said first message by transmitting a second message to said mobile switching center (router) indicating that said source mobile station is being handed off to said third base station (BS10) and wherein said second message contains

and IP address of said second base station on said local IP network (Source IP), a service option field (message type) associated with said MS-MS packet data call, a call identifier value (sequence number) used by said first and second base stations to identify said MS-MS packet data call, and mobile identifier values (mobile device IP and destination IP) associated with said source and destination mobile stations (Handoff message sent to new router which forward to router R7 and router forward to old base station BS9, Paragraph 70 and 87).

19. Regarding Claim 15, La Porta et al. further discloses the second message comprises a Handoff Required message (handoff path setup message, Paragraph 70, and 85-87).

20. Regarding Claim 16, La Porta et al. further discloses transmitting a third message to said third base station (BS10), wherein said third message contains: said IP address of said second base station on said local IP network, said service option field associated with said MS-MS packet data call, said call identifier value used by said first and second base stations to identify said MS-MS packet data call, and said mobile identifier values associated with said source and destination mobile stations (Paragraph 70, 85-87), however La Porta et al. fails to disclose the mobile switching center (router) is operable to respond to said second message and send the message to the third base station.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to send the handoff required message to the old base station to be forwarded through the MSC to the new base station instead of sending the handoff



required message directly to the new base station in order to accommodate the mobile station when not yet authorized to communicate with the new base station.

21. Regarding Claim 17, La Porta et al. further discloses the third message comprises a Handoff Request Message (handoff path setup message, Paragraph 85-87).

22. Regarding Claim 18, La Porta et al. further discloses the third base station (BS10) responds to said third message by establishing said second packet data bearer connection (associated interface for all packets delivered to mobile device) with said second base station (BS11)(Paragraphs 75 and 86).

23. Regarding Claim 19, La Porta et al. further discloses the third base station (BS10) established said second packet data bearer connection using an IP address of said second base station, a call identifier value used by said first and second base stations to identify said MS-MS packet data call, and mobile identifier values associated with said source and destination mobile stations (Paragraph 86).

24. Regarding Claim 20, La Porta et al. further discloses the second base station (BS11) responds to the establishment of said second packet data connection by said third base station (BS10) by transmitting data packets associated with said MS-MS packet data call to said third base station via said second packet data bearer connection (data transmitted through default routing path, Paragraph 75).

25. Regarding Claim 21, La Porta et al. further discloses the mobile switching center is operable to transmit a fourth message (packets redirected and router forwards instant handoff path setup message to BS9, Paragraph 87) to said first base station (BS9) after

said source mobile station is handed off to said third base station, and wherein said fourth message causes said first base station to notify said second base station (BS11) that said first packet data bearer connection between said first and second base stations is being removed (routing table entry changes, Paragraph 87).

26. Regarding Claim 22, La Porta et al. further discloses the second base station in response to said notification from said first base station that said first packet data bearer connection is being removed ceases transmitting data packets associated with said MS-MS packet data call to said first base station (Paragraph 75).

27. Claim 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Porta et al. (US 20020057657) in view of Nieminen et al. (US 20040005884) and Manning et al. (US 6580699) as applied to claims 1 and 12 above, and further in view of Padovani (US 6999766).

28. Regarding Claims 2 and 13, La Porta et al. further discloses sending a first message (handoff path setup message, Paragraph 85), however La Porta et al. fails to disclose the first message includes a signal strength measurements associated with the third base station.

In an analogous art, Padovani discloses a mobile station sending a signal strength measurement message that invokes a handoff at a handoff controller (Col. 7, Lines 42-55), which enables a mobile initiated handoff system.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to send a signal strength measurement in a handoff message in order to allow the system to act on a mobile initiated handoff request.

### ***Response to Arguments***

Applicant's arguments filed 10/23/2008 have been fully considered but they are not persuasive. Regarding applicant's argument that La Porta in view of Nieminen and Manning fail to disclose the limitations of claim 1, Examiner disagrees because the limitations as broadly interpreted are disclosed by the references as listed above in the Final Rejection. Regarding applicant's argument that the references fail to disclose a local IP network capable of transferring data packets associated with said MS-MS packet data call directly between said first and second base stations via a first packet data bearer connection, wherein said first base station is capable of receiving a first message from said source mobile station indicating that said source mobile station is to be handed off to a third base station, and wherein said first base station, in response to said first message, initiates establishment of a second packet data bearer connection on said local IP network for transferring said data packets associated with said MS-MS packet data call directly between said second and third base stations, Examiner disagrees. La Porta discloses the first base station is capable of receiving a first message as a handoff path setup message transmitted to new base station to forward to old base station (Paragraph 85-87) and the message is received from said source

mobile station indicating that said source mobile station is to be handed off to a third base station (BS10) as the same handoff path setup message operates between any two base stations, and wherein said first base station, in response to said first message, initiates establishment of a second packet data bearer connection on said local IP network for transferring said data packets associated with said MS-MS packet data call directly between said second and third base stations (updates routing entry table for all packets to route packets intended for a moving recipient from any base station to a new base station including performing the same over a second and third base station, Paragraph 87). Nieminen et al. discloses a correspondent node communicating with a destination mobile station (Fig. 3, Item 305 and 307). Manning et al. discloses transferring data packets directly as using a storing packets and transferring the packets to a second base station (Col. 8, Line 56- Col. 9, Line 12) where the transferring is done through a direct communication link between the two base stations (Direct connection between the base station controllers, Col. 4, Lines 55-64, Fig. 2) and sending both an assignment request and complete message (Fig. 6, Items 96 and 106), which enables a timely maintenance when a mobile station roams from one BSC to another and the use of radio resources. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an assignment request including a IP address and mobile identifier) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In response to

applicant's argument that the references fail to disclose "a local IP network capable of transferring data packets associated with said MS-MS packet data call directly between said first and second base stations via a first packet data bearer connection", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Therefore the limitations as broadly claimed and interpreted are disclosed by the references above in the Final Rejection.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Lim whose telephone number is (571) 270-1210. The examiner can normally be reached on Mon-Thurs 9:00am-4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. L./  
Examiner, Art Unit 2617

/Lester Kincaid/  
Supervisory Patent Examiner, Art Unit 2617